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DIA AND OSD REVIEW COMPLETED

SECRET

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SECRET

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		Approved For Re	e e a se 2002/02/05/20 : c SECRET / NO	IA-RDP79R0096	1AQ0A	4000200081401056D SICR	
		SPECIFIC I	INTELLIGENCE COL	LECTION REQU	JIREMI	ENT	
2. TO			3. EXPIRATION DATE 12 October 19			rol number 100-02801	
			5. DISPATCH DATE		S. PRIOF	C	
7. SUBJECT							
(ប)	Anti	-Ballistic Miss	ile Systems			USSR	
9. (SEC	RET/	NOFORN) REQUIR	EMENTS:			BACKGROUND; 11. GUIDANCE;	
Info	rmat	ion on possible	Soviet anti-ball	istic missile	or an	ti-satellite systems	
is needed to permit detailed analysis and determination of the following:							
a. Overall system:							
(1) Acquisition and tracking ranges, with a data tolerance of + 10%.							
	(2)	Intercept altitude and range parameters, with a data tolerance of + 10%.					
1	(3)	Minimum tracking time required, with a data tolerance of + 1 second.					
((4)) Engagement sequence and problem solution times, with a data tolerance					
of + 1 se	econ	đ.				,	
((5)	Component equipment tie-up time, i.e., time required before equipment					
can be used for engagement of another target, with a data tolerance of + 1 second.							
((6)	Degradation of	system capabiliti	es for initia.	l sal	vo and after each	
successiv	ve s	alvo.					
((7)	Exact number of	f missiles which o	an be launche	d from	m each pad in a	

- given period of time; exact reload capabilities in a given period of time.
 - (8) Over-all system reliability, with a data tolerance of \pm 5%.
- (9) Exact number of missiles required for a kill probability of one, two and three sigma.
 - (10) Exact degree of system mobility.

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18. PORTIO ASSIGNE	S OF REQU D TO ADDR	JIREMENT (Item ESSEE FOR AC	9) 14. TION .			18. APPROVED FOR COLLE	CTION
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REPLACES ACSI FORM 1, 17 MAY 60, OPNAV FORM 8820.6, OCT 58, AF FORM 496, FEB 61, WHICH MAY BE USED UNTIL 1 JUNE 1962.

17. ORIGINATOR'S NAME, OFFICE, TELEPHONE NUMBER AND DATE	be removed prior to transmittal of SICR to	
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- (11) Exact information on multiple target engagement capabilities and maximum number which can be engaged simultaneously.
- (12) Exact number of interceptor missiles which can engage a single target.
 - (13) Exact entend of system dead zones (missile, electronics, terrain).
 - (14) Site layout:
 - (a) Control points.
 - (b) Power supply.
 - (c) Fueling facilities.
 - (d) Location and size of missile handling equipment.
 - (e) Missile storage sites.
 - (f) Method of on-site transportation.
 - (g) Location of electronic items.
 - (h) Construction materials used.
- (15) Specific locations of launch sites, support facilities and electronic facilities; local ground environment; number and dimensions of revetments; security.

b. Missiles:

- (1) External configuration and dimensions, including weights, with a data tolerance of +10%.
 - (2) Range and altitude parameters, with a data tolerance of \pm 10%.
 - (3) Trajectories of R&D and training target missiles.
- (4) Speed and maneuverability parameters, with a data tolerance of + 10%.

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- (5) Warhead subsystem:
 - (a) Type (HE or nuclear).
 - (b) Configuration.
 - (c) Weight.
 - (d) Yield, with a data tolerance of \pm 1 KT.
 - (e) Kill radii, with a data tolerance of + 100 ft.
 - (f) Fuzing.
- (6) Guidance subsystem:
 - (a) Type (command, terminal homing)
 - (b) Accuracy (CEP, reliability) with a data tolerance of + 10 ft.

or ± 5%.

- (c) Vulnerability
- (7) Propulsion subsystem:
 - (a) Type (liquid, solid, hybrid)
 - (b) Propellants.
 - (c) Propellant weight, with a data tolerance of + 10%.
 - (d) Engine/nozzle configuration.
- c. Radar:
 - (1) Numbers
 - (2) Type (pulse or CW).
- (3) Frequency, with a data tolerance of \pm 5 mc up to 1000 mc and \pm 10 mc from 1000 mc up.
- (4) Physical configuration and dimensions (photos or sketches are desired):

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- (a) Set proper.
- (b) Antenna (including orientation and movement limitations).
- (c) Other components (IFF, etc.),
- (5) ECCM capabilities.
- (6) Peak and average powers, with a data tolerance of + 10 KW average.
- (7) Effective range and altitude capability, with a data tolerance of

+ 10%.

- (8) Discrimination capability.
- (9) Vulnerability to countermeasures.
- (10) MTI capability
- (11) Scan rate, with a data tolerance of \pm 10%.
- (12) Tracking accuracy, with a data tolerance of + 10-20 ft.
- (13) Azimuth and elevation limitations, with a data tolerance of \pm .5 deg.
- (14) Function or purpose of radar within target detection and/or missile guidance system.
 - (15) Any functions other than missile defense.

d. Launcher:

- (1) Configuration
- (2) Exact number of missiles for each unit.
- (3) Azimuth and elevation limitations, with a data tolerance of $\pm 1^{\circ}$.
- (4) Firing positions, with a data tolerance of \pm 1°.
- (5) Slew rate, with a data tolerance of $\pm 2^{\circ}/\text{sec}$.
- (6) Vulnerability to attack or sabotage.

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- e. Communications:
 - (1) Types.
- (2) Geographical location and directional orientation of communications antennas.
 - (3) Number and type of buildings used in conjunction with communications.
 - f. Computers:
 - (1) Time delay in computing and relaying information.
 - (2) Physical size.
 - (3) Power requirements.
 - (4) How inputs and outputs are relayed.
 - g. Other ground handling equipment:
 - (1) Reload device
 - (a) Configuration
 - 1 Track, trailer, other.
 - 2 Railway sled, ram, other.
- (b) Rates of movement, with a data tolerance of ± 2-5 ft/sec or ± 2 deg/sec.
 - (c) Capacity of movements
 - 1 Exact number of missiles per unit.
 - 2 Exact total number of missiles per unit.
 - (d) Location relative to launcher, with a data tolerance of ± 10-20 ft.
 - (2) Ready storage facility/equipment:
 - (a) Configuration.

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- (b) Location with respect to launchers, with a data tolerance of \pm 25-30 ft.
 - (c) Exact total capacity.
- (d) Rate of processing to reload device, with a data tolerance of + 1 unit.
 - (e) Functions served:
 - l Strictly standby/hold area.
 - 2 Missile subsystem check out
 - a Go/no go type.
 - b Detailed checkout type.
 - (f) Vulnerability to attack or sabotage.
 - (3) Propellant handling equipment.
- (4) Type and size of vehicles used with system, with particular emphasis on resemblance to vehicles used with other systems such as SA-1 and SA-2.
 - h. Production facilities:
 - (1) Plants producing ABM systems or components.
 - (2) Design and production bureaus associated with ABM systems/components.
 - (3) Resources required to manufacture the various components.
 - (4) Rate of manufacture, with a data tolerance of 2-5 units/month.
 - i. Organizations, locations and personalities
 - (1) R&D organization and personnel for ABM development.
 - (2) Organization for inter-range coordination.
 - (3) Organization for deployment of ABM systems.

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10. (SECRET/NOFORN) BACKGROUND:

- a. Three complexes of unusual configuration have been reported under construction and nearing completion in the Leningrad area, one approximately 30 KM NE of the city (30°44'W/60°05'N), one 65 KM NW (29°44'W/60°26'N), and the third 60 KM SW (29°14'W/59°44'N).
- b. Each of the complexes consists of a cluster of five launch sites. Each site resembles an operational SA-2 site with six launching pads forming a circular arrangement. A circular access road forms the periphery around the site, and in the center is located what is most likely the control building (see Attachments 1 & 2).
- c. In addition to the suspected ABM complexes, the Soviets are suspected of converting existing SA-1 and/or SA-2 sites to ABM sites. Sites C-05, C-16, C-18, in the Moscow area C-31, E-19, E-23, E-24 and E-33 are possibly being converted.
- d. Other possible areas where sites may be expected to appear include, but are not limited to:

BAKU	KIYOV	ROSTOV
BRATSK	KOMSOMOLSK	SARY SHAGAN
CHITA	KUYBYSHOV	SEMI PALATINSK
FERGANA	MINSK	STARAYA RUSSA
GORKIY	MOSKVA	SVERDLOVSK
KAMCHATKA	NOVOSIBIRSK	TASHKENT
KAZAN	ODESSA	TBILISI
KHABAROVSK	RIGA	VLADIVOSTOK
KHARKOV		

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- e. A Soviet Bloc news release indicates that three radars are needed "to guide and aim the anti-rockets". It has been estimated that a similar number are needed in the ABM program, possibly:
 - (1) HEN ROOST for early warning
 - (2) FIRE WHEEL/SHIP WHEEL for interceptor tracking.
 - (3) HEN NEST/HEN EGG for tracking

A fourth radar, possibly a track-while-scan or a monopulse-type, may be used for final tracking.

f. Since HEN ROOST is an extremely large installation, it may be easily seen and recognized if the opportunity for observation arises. The launch facilities, on the other hand, may be below ground and not readily apparent. For this reason, radar siting will probably afford the best site signature for the ABM system (see Attachments 4-6).

11. (CONFIDENTIAL) GUIDANCE:

- a. The data tolerances listed in para 9 are the ultimate desired for analysis. While every effort should be made to satisfy these tolerances in the collection of intelligence, less accurate data will be useful in closing intelligence gaps.
- b. AFM 200-14, Chapter 13, contains intelligence collection guidance for anti-ballistic missiles for defense systems. DIAM 58-15, section two, provides identification guidance of electronic systems.
- c. This STCR supersedes STCR D-CIC-00402. (S)(No FORN)
 12. ATTACHMENTS:
 - a. Attachment l SA-2 "Daisy-Link" Site and Individual ABM Launch Area.
 - b. Attachment 2 Leningrad ABM Launch Complexes.

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- c. Attachment 3 Synthesized AM-1 Missile.
- d. Attachment 4 Missile Beacon Tracking Radar.
- e. Attachment 5 HEN NEST Radar.
- f. Attachment 6 HEN ROOST Radar.